

Comments on “The Returns on Education Investments”

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(Peer Reviewer for OFM)

An Excellent Review

- A careful examination of education and lifetime earnings
- Solid economic returns from selected educational programs
- A good discussion of the issue of externalities
- A nice discussion of social impacts of education investments
- A thoughtful evaluation of investment options

Raises Some Good Questions

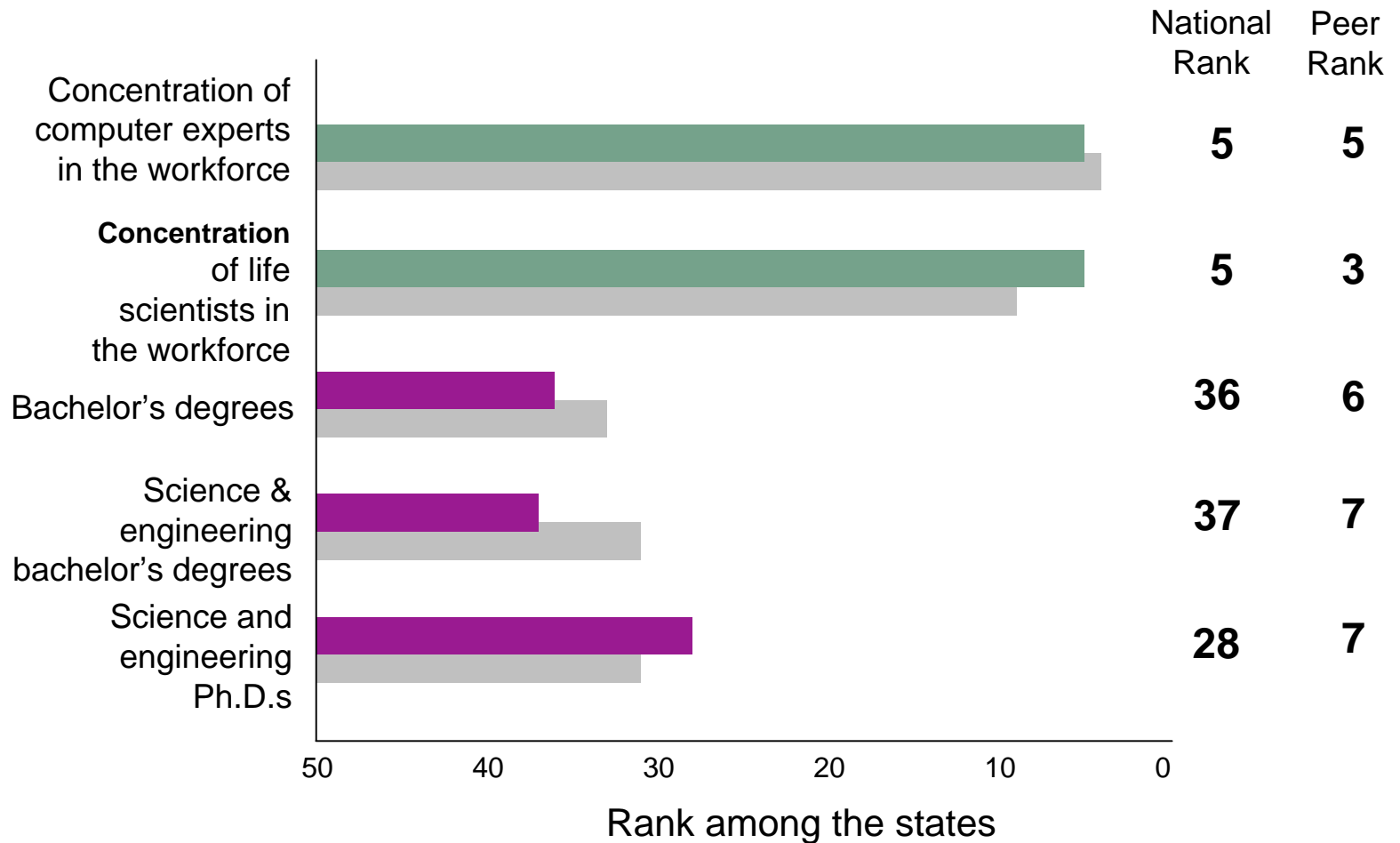
- How much tax revenue comes back to the state as a result of income increases due to these programs?
- How much investment are we currently making in the areas reviewed compared to other states?
- At the margin, if we spent an additional \$ on these programs, what mix would produce the greatest return, and what mix would be most equitable?

Our Poor Position in Higher Education

- We produce many fewer BA and Graduate degrees than we could due to lack of access
- This means many state high school graduates earn less over the course of their lifetime than they would if they had access to BA and Graduate degrees
- This also means that there is less research at Colleges and Universities, reducing the innovation potential in this state

HIGHER EDUCATION

Benchmarking Results



Source: Technology Alliance 2006 Benchmarking Study

HIGHER EDUCATION

Benchmarking Results

Bachelor degrees conferred	1998	2003
Number of degrees conferred	23,403	25,558
% of 18-24 year olds	4.34%	4.13%
National/Peer rank	33 / 6	36 / 6

Source: Technology Alliance 2006 Benchmarking Study

HIGHER EDUCATION

Benchmarking Results

S&E Bachelor degrees conferred	1998	2003
Number of degrees conferred	3,918	4,231
% of 18-24 year olds	0.73%	0.68%
National/Peer rank	31 / 6	37 / 7

Source: Technology Alliance 2006 Benchmarking Study

HIGHER EDUCATION

Benchmarking Results

Science and engineering Ph.D.s	2003	1999
Number of degrees conferred	441	477
Per 100,000 24-34 year olds	51.62	55.52
National/Peer rank	31 / 7	28 / 7

Source: Technology Alliance 2006 Benchmarking Study



Benchmarking Results

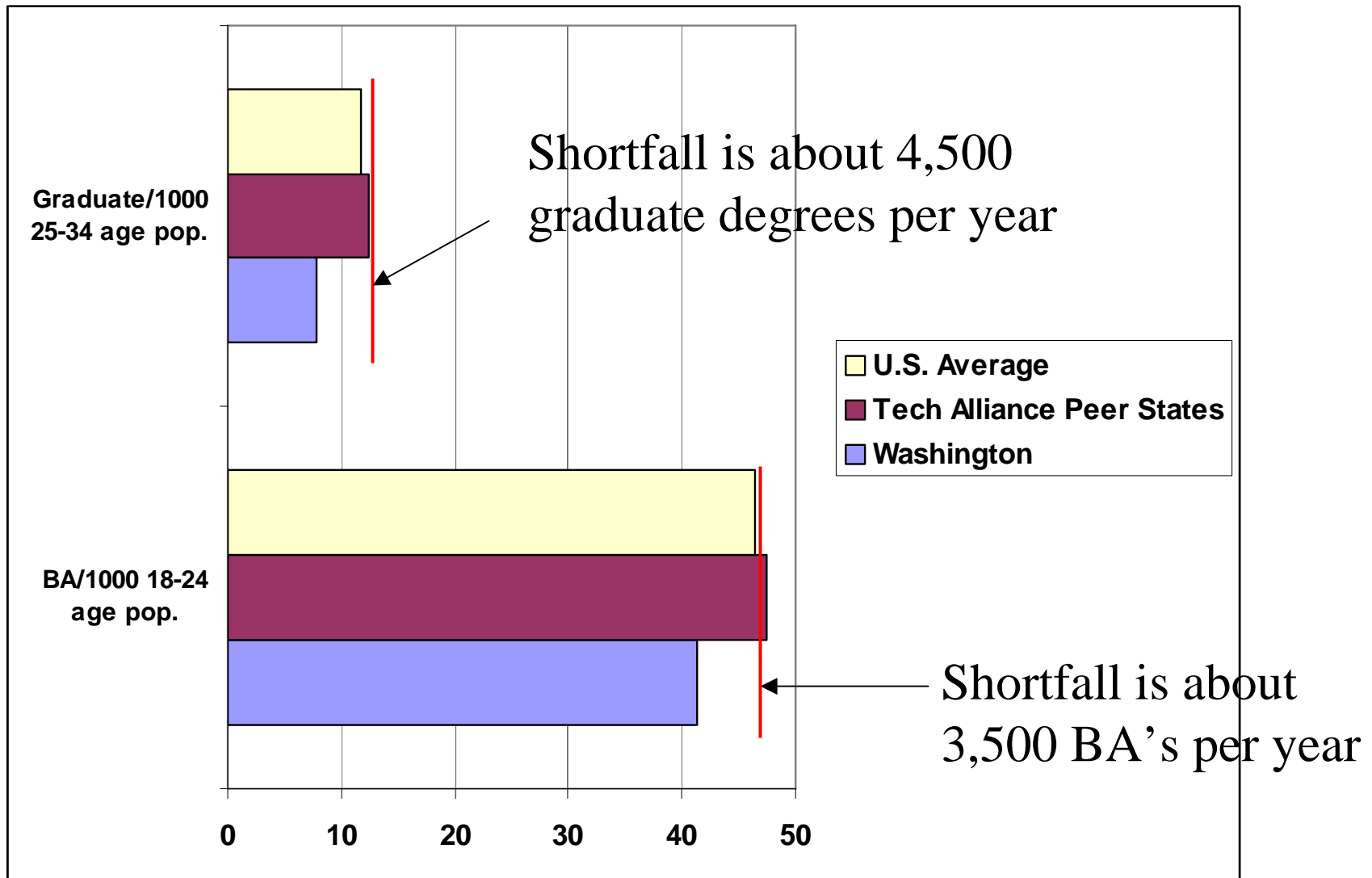
RESEARCH CAPACITY

Academic R&D	1999	2003
Expenditures in \$1,000	588,075	869,695
Per capita	101	142
National/Peer rank	20 / 6	21 / 5

Washington is the 15th most populous state

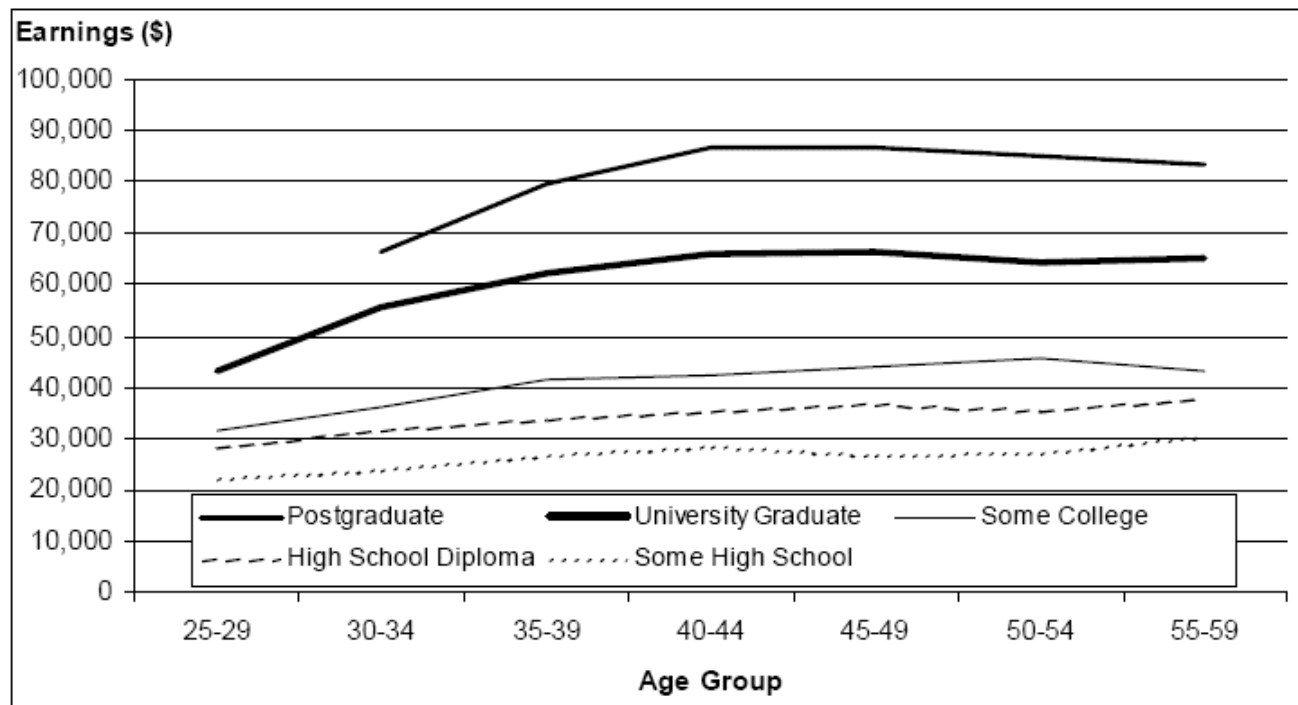
Source: Technology Alliance 2006 Benchmarking Study

Shortfall in Degree Production



National Data on Educational Attainment and Earnings

FIGURE I:1
MEAN ANNUAL EARNINGS BY AGE AND EDUCATIONAL ATTAINMENT
IN THE UNITED STATES
Full-time, Year-Round Workers, 2002-03



Source: U.S. Department of Commerce, Census Bureau, Current Population Survey.

From Sommers

Source: Hill et al. *The value of higher education* 2003, p. 14

Upshot: A Huge Income Loss to State Residents & Need for Access

- Approximately \$1 billion per year in lost net present value of income to Washington High School graduates unable to get into BA/BS programs
- Approximately \$1.7 billion per year in lost net present value of income to Washington BA graduates unable to get a graduate degree
- Need about 13,000-16,000 BA and 12,500-14,000 graduate slots to move to US or peer state levels

An Additional Implication

- If 30% of this added enrollment was in Science and Engineering fields, this would bring \$180 - \$210 million in additional research at universities in Washington State
- This would move us from 21st per capita in academic R&D to 6th, a position similar to that found for other performers of R&D in Washington's research-intensive economy

On the Past and Future

- In the late 1980's I was asked to help focus on needs for higher education in the Seattle metro area, in the context of the UW branch campus studies
- The results have been MUCH smaller expansion of these campuses than called for
- Will Washington State continue to disadvantage bright residents due to an unbalanced tax system?
- Are there leaders in this state willing to step up to the challenge of balancing priorities in the state higher education system, and its funding?
- If so, where will growth take place to give our residents opportunities granted by other states?